	JOURNAL	IF-2003	JOURNAL	IF 2004	JOURNAL	IF 2005
30.	J CAMEL PRACT RES	0.155	INDIAN J MAR SCI	0.150	INDIAN MAR SCI	0.202
31.	J PLANT BIOCHEM BIOT	0.151	J APPL ANIM RES	0.136	INDIAN FIBRE TEXT	0.190
32.	INDIAN J FIBRE TEXT	0.139	ORIENT INSECTS	0.125	J CAMEL PRACT RES	0.174
33.	INDIAN J PURE AP MAT	0.129	DEFENCE SCI J	0.121	DEFENCE SCI J	0.172
34.	J FOOD SCI TECH MYS	0.125	J CAMEL PRACT RES	0.114	INDIAN ENG MATER S	0.160
35.	INDIAN MAR SCI	0.124	T INDIAN I METALS	0.114	P INDIAN AS-MATH SCI	0.154
36.	IETE TECH REV	0.122	INDIAN J FIBRE TEXT	0.112	ASIAN J CHEM	0.153
37.	DEFENCE SCI J	0.084	INDIAN J PURE AP MAT	0.105	J APPL ANIM RES	0.132
38.	NATL ACAD SCI LETT	0.068	NATL ACAD SCI LETT	0.100	J FOOD SCI TECH MYS	0.123
39.	T INDIAN I METALS	0.065	IETE TECH REV	0.092	INDIAN J ANIM SCI	0.090
40.	SADHANA-ACAD P ENG SCI	0.064	INDIAN J ENG MATER S	0.087	INDIAN J AGR SCI	0.084
41.	INDIAN J ANIM SCI	0.061	IETE J RES	0.075	ASIAN J SPECTROSC	0.083
42.	INDIAN J AGRON	0.041	INDIAN J ANIM SCI	0.067	INDIAN J PURE AP MAT	0.073
43.	INDIAN VET J	0.037	J ADV ZOOL	0.054	INDIAN PHYS	0.072
44.	IETE J RES	0.029	J FOOD SCI TECH MYS	0.053	NATL ACAD SCI LETT	0.057
45.	ORIENT INSECTS	0.020	INDIAN VET	0.051	IETE J RES	0.052
46.	ANN ARID ZONE	0.010	INDIAN J AGRON	0.036	INDIAN VET J	0.052
47.			J CHEM SCI	0.000	IETE TECH REV	0.010
48.					J ADV ZOOL	0.000
49.					J EARTH SYST SCI	0.000

Interest of the young in science

103. SHRIMATI SHOBHANA BHARTIA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether in the backdrop of the Prime Minister expressing concern over declining interest of the young in science, the Ministry proposes an ambitious five-year scheme which incorporates measures such as scholarship, summer camps with science icons and assured income for the talented in science to that they take up research as a career;

(b) the details of the proposed scheme; and

(c) by when it is likely to be implemented?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL) (a) Yes, Sir.

(b) and (c) A special Scheme for Promoting Innovation in Science Pursuit for Inspired Research (INSPIRE), has been proposed by Department of Science and Technology, Ministry of Science and Technology, Government of India. The details of the proposed scheme along with the implementation schedule are given below.

Motivation:

There has been a felt need to strengthen the innovation infrastructure of India in her preparation for leveraging the enormous opportunities being offered by knowledge economies of the world. If Vision 2020 of India to emerge a major knowledge and global power were to be realized, sufficient supply of young talents need to be attracted to study and take up careers with science. It is required that suitable systems and mechanisms to meet the innovative infrastructural needs for application of technology for wealth generation in the knowledge economy of 2020 be designed and implemented now. Advance actions with a foresight for building innovative knowledge infrastructure are being considered and proposed by the Ministry of Science and Technology. The motivation behind the proposed scheme "Innovation in Science Pursuit for Inspired Research (INSPIRE)" is to prepare the Indian science and technology for a possible leadership position in 2020.

Talent supply chain management: An essential need for converting comparative advantages into competitive strength:

Currently, vast pool of talent supply is drawn more effectively by service sectors in a competitive market environment where management of technology plays a critical role. Generation of pre-competitive technology based on first principles in science would form the differentiating element in the knowledge based economies. In this endeavour, Human Resource and talent supply chain management practices form the most critical component. India enjoys a natural comparative advantage by virtue of demography and inherited knowledge systems. The conversion of comparative advantage to competitive strength will require carefully planned interventions in a competitive world.

Other major countries in Asia namely Japan, China and South Korea are deploying large financial resources and building their R & D infrastructure by scale expanding their doctoral research programs. It is estiamted that China has multiplied the number of scholars undertaking Ph. D. studies in science by ten-fold during the last fifteen years. An India specific model of conversion of comparative strength into competitive advantage calls for a suitable scheme to offer for young people with both aptitude and talent careers with science and innovation as a choice. INSPIRE is a proposed innovation to offer science as an carrer option by providing necessary

opportunities for youth with aptitude for careers seeking innovation and psychic delight in addition to reasonable physical income.

Features of the proposed scheme "INSPIRE":

The scheme proposed inspire includes three elements in different age groups. They are (a) providing Science innovation scholarship of Rs. 5000 for a total of one million young learners of the age group 10-17 once in their school career during the next five years for experiencing the joy of innovations (b) providing a mentorship through global icons including 60-70 Nobel prize winners and 150-200 Indian leaders in science through a summer camp for the top 1% performers in the Class X examination every year for a period of five years and (c) offering scholarship for doctoral research backed by an assured research carrer opportunity scheme for a total of 1000 young people leaving plus two level for a period of five years after their Ph. D. in sciences. This integrated approach provides a hand holding and safety net mechanism for identifying and nurturing youth with aptitude and talent for research. Unless the nation nourishes the root of innovation, it will find it difficult to bear the fruit. The model of China based on quantum increases in R & D base and supply of funds may be difficult to bear the fruit. The model of China based on quantum increases in R & D base and supply of funds may be difficult for India to match. India model is therefore based on identifying early and building the required human resource base for the country within the absorption capacity of our current S & T system and R & D base.

Estimated fund requirements for 2007-2012:

The proposed scheme INSPIRE estimates the fund requirement of about Rs 1500 crores for a period of five years with a break up is given below:

Sub theme	Number of people targeted	Age group target	Estimated cost for five years
Science Innovation Scholarship	One million in 5 years	Between 10 and 17	Rs 500 crores at Rs 5000 per child
Summer camp with Global icons	45000-50000	Class X passed, top 1% of all school boards	Rs 250 crores for five years
Assured opportunity scheme for research Careers	2000 at plus two passed level	17-20 at Rs. 5000pm per scholar for 3 years	Rs 72 crores for five years

Sub theme	Number of people targeted	Age group target	Estimated cost for five years
	• 1000 at MSc	20-22 at Rs 8000-7500pm per scholar for two years;	Rs. 68 crores for five years
	• 500 Ph: D. levels	22-26 at Rs8000-12000 pm for four years	Rs. 22 crores for five years
	• 500 young blood national assistant professorship levels for a non-tenure positions in plan funds with Rs. 10 lakh research grant per year	26-28 to 31-33 for five years at Rs. 15000-20000 pm	Rs. 385 crores for five years
Other support systems			Rs 50 crores
TOTAL			1347 or approximately 1350 crores for five years

Justification for the selection of size of intervention:

It is estimated that about 1,15,000 personnel are engaged in research and development functions in the country. Given the rate of displacement of personnel in professional functions at the national average of 4% per year, about 4600 jobs would be replaced at steady state level. A provision of the entry of 2000 people selected through advanced action supported at school levels through a National investment of Rs. 750 crores in five years may afford about 500 people after exit at various levels for assured opportunity scheme. If the assured opportunity scheme proposed is mounted on the talent attraction schemes an investment of another Rs. 550 crores would be required. The scheme is expected to attract from among the young innovator at least 500 youth with a combination of both aptitude and talent to research seems a viable and economically balanced intervention.

Implementation of the scheme:

A scheme of this nature, involving children and students at various levels, needs to be nurtured very sensitively. At the first two levels, namely, Science Innovation and Summer Camp, the scheme is proposed to be implemented through a bottom-up approach by involving the District/State level systems dealing with school education in these age groups, including the Departments of Education and State Councils on Science and Technology in the various states and also the NCERT.

The Assured Opportunity for Research Career component will be implemented through National S and T institutions like the IISc., Bangalore, Homi Bhabha Centre for Science Education, Bombay, S N. Bose Centre for Basic Sciences, Calcutta, who have enormous experience in handling Research students and nurturing them into a research career.

The over all scheme "INSPIRE" will be administered by the Government of India through the Department of Science and Technology with the guidance of a National level apex structure to be created for this purpose.

Shifting of Sangam in Allahabad

104. SHRI VIJAY J. DARDA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that Sangam in Allahabad, the site of Ardh Kumbh, where Ganga, Yamuna and mythical Saraswati rivers meet has shifted Westwards by about 900 metres;

(b) if so, whether the analysis done by a Professor of Civil Engineering at IIT. Kanpur and Ph.D. student of the Landset Satellite data proved that the confluence has actually moved;

(c) whether this shifting is due to active tectonics in the Allahabad region or the 'river load' obstructing the flow of the river; and

(d) whether Government are thinking of having a detailed study in such matters so that faith of the devotees is not shaken?